Claims

1. A batch, in particular for the production of a refractory shaped body, including

a) a refractory, Al_2O_3-containing metal oxide main component, which contains 40 to 60% by weight of Al_2O_3,

b) a phosphate bond, in particular produced by phosphoric acid or monoaluminum phosphate, and

c) finely particulate SiC with a grain size of <0.2 µm, the batch containing 3 to 15% by weight of finely particulate SiC, the grain size distribution of the SiC being selected in such a manner that more than 2.0% of SiC, based on the total quantity of the batch, is <0.045 mm.

2. The batch as claimed in claim 1, which contains 80 to 97% by weight of the refractory metal oxide main component.

3. The batch as claimed in one of the preceding claims, wherein the SiC content is between 3 and 8% by weight.

4. The batch as claimed in one of the preceding claims, wherein the silicon carbide is a fused silicon carbide.

5. The batch as claimed in one of the preceding claims, wherein the silicon carbide is a regenerated silicon carbide product.

6. The batch as claimed in one of the preceding claims, wherein the refractory, Al_2O_3-containing metal oxide main component includes natural raw materials selected from the sillimanite group and/or bauxite

and/or refractory clay and/or synthetic raw materials, such as sintered mullite, fused mullite, calcined alumina, sintered corundum and/or fused conrundum.

7. The batch as claimed in one of the preceding claims, wherein the refractory main component contains up to 15% of refractory clay.

8. A process for producing a batch as claimed in one of claims 1 to 7, wherein a refractory, Al_2O_3-containing metal oxide main component, which contains 40 to 60% by weight of Al_2O_3, and finely particulate SiC with a grain size of <0.2 mm and, as binder component, phosphoric acid or monoaluminum phosphate are mixed with one another, the SiC being added in a fineness and quantity which are such that more than 2.0% by mass, based on the total batch, of sic is <45 µm.

9. The process as claimed in claim 8, wherein 80 to 97% by weight of the main component is admixed.

10. The process as claimed in claim 8 and/or 9, wherein between 3 and 8% by weight of SiC is admixed.

11. The process as claimed in one of claims 8 to 10, wherein up to 15% of the main component is replaced by refractory clay.

12. The batch as claimed in one of claims 8 to 11, wherein the silicon carbide used is a fused silicon carbide.

13. The batch as claimed in one of claims 8 to 12, wherein the silicon carbide used is a regenerated silicon carbide product.

14. The process as claimed in one of claims 8 to 13, wherein natural raw materials, such as raw materials selected from the sillimanite group, bauxite or

refractory clay, and/or synthetic raw materials, such as sintered mullite, fused mullite, calcined alumina, sintered corundum or fused conrundum, are used as refractory, Al_2O_3-containing metal oxide main component.

15. The process as claimed in one of claims 8 to 14, wherein the refractory, Al_2O_3-containing main component is used with a maximum grain size of 4 mm and a grain size distribution which corresponds to that of a typical Fuller curve.

16. The process as claimed in one of claims 8 to 15, wherein the batch is pressed into shaped bodies using a pressure of from 60 to 110 MPa.

17. The process as claimed in one of claims 8 to 16, wherein the shaped bodies are dried at temperatures of over 100°C, in particular 120°C.

18. The process as claimed in one of claims 8 to 17, wherein the shaped bodies, after drying, are fired at a sintering temperature of approx. 1100 to 1400°C.